

CLAIMS

1. A fuel cell system for a portable electronic device, comprising:
 - a fuel cell capable of operating on hydrogen that is obtained from methanol;
 - 5 a reservoir for storing a supply of methanol, suitably connected to the fuel cell, wherein a fuel quantity measuring means is located within the reservoir, wherein the fuel quantity measuring means comprises:
 - an acoustic transmitter for transmitting an acoustic signal within the reservoir, and
 - 10 an acoustic receiver for receiving the acoustic signal, wherein the fuel quantity measuring means is adapted to:
 - measure a response at the acoustic receiver, and
 - cross reference the measured response to a lookup table which provides the corresponding fuel level.

2. A fuel cell system for a portable electronic device, comprising:
 - a fuel cell that operates on hydrogen obtained from a liquid hydrocarbon fuel; and
- 5 a reservoir for containing a supply of the liquid hydrocarbon fuel, said reservoir connected to the fuel cell, wherein a sensing means for measuring the amount of liquid hydrocarbon fuel that is present is located within the reservoir, wherein the sensing means comprises:
 - an acoustic transmitter for transmitting an acoustic signal within the reservoir, and
 - 10 an acoustic receiver for receiving the acoustic signal, wherein the sensing means is adapted to:
 - measure a response at the acoustic receiver, and
 - cross reference the measured response to a lookup table which
 - 15 provides the corresponding fuel level.
3. The fuel cell system as recited in claim 2, further comprising an indicia readable by a human user of the portable electronic device, wherein the indicia comprises a display for displaying the fuel level.